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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,612

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Glenn Gordon

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DOW CORNING CORPORATION CO1232  
2200 W. SALZBURG ROAD  
P.O. BOX 994  
MIDLAND, MI 48686-0994

EXAMINER

MOORE, MARGARET G

ART UNIT

PAPER NUMBER

1796

NOTIFICATION DATE

DELIVERY MODE

12/29/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents.admin@dowcorning.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/564,612	<b>Applicant(s)</b> GORDON ET AL.	
	<b>Examiner</b> Margaret G. Moore	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 TO 5, 7 TO 12, 17 TO 24 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 TO 5, 8 TO 12, 18 TO 24 is/are rejected.
- 7) ☒ Claim(s) 7, 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/12/06</u> . | 6) <input type="checkbox"/> Other: ____.  |

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1. Claim 17 IS objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. 1) this claim depends upon a future claim rather than a previous claim and 2) since claim 19 is drawn to an emulsion which requires water, this claim drawn to a particle with no water cannot be considered further limiting.

2. Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is confusing to require that the silicone resin be added in the form of an emulsion when claim 19 requires that the silicone resin be in the form of a neat liquid, solution or meltable solid. Clarification is required.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 to 4, 8 to 11 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Decker et al.

For the purposes of claim interpretation, the Examiner notes that she does not consider the units (i) (represented by subscript a) to be required in the silicone resin (B)

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of claims 1 and 2. Note, for instance, that "less than .4" (the definition of a) embraces 0. Note too that dependent claim 5 specifically includes silicone resins that do not contain any such units (see for instance the second silicone resin in claim 5 having only "D" and "T" units, no "M" units).

Decker et al. teach amino functional silicone resins that are used as toughening agents for epoxy resins. See for instance the abstract. The top of column 6 teaches various epoxy resins that meet the claimed component (A) in claims 1 and 2 as well as the epoxy resin in claim 3.

Column 4, lines 47 and on, teach silicone resins that meet the claimed component (B). The Examiner notes that, even if M units of formula (i) in claims 1 and 2 were required, Decker et al. render obvious the presence of such units having an amino functional group attached thereto (column 4, line 52).

Particular attention is drawn to the specific resins prepared in the examples. According to the Examiner's calculation, NH-1 has a corresponding "b" value of .14, but the silicone resins NH-2 and NH-3 both have "b" and "c" values that fall within the claimed range. As can be seen from Table II, these resins fall within the claimed NH equivalent weight range. These resins also meet the mole percent of silicon atoms having amino functional groups as well as the claimed weight percent of Si bonded aryl groups. These resins also meet the R groups in claim 4. In this manner Decker et al. anticipates claimed component (B).

The Examiner notes that claimed component (D) is optional, since "up to" allows for 0. Thus for claims 9 and 10 note that this component is not required.

For claims 8 and 11, see column 7, lines 15 to 32.

The epoxy and amino silicone resins react to form a cured composition, meeting claim 18.

6. Claims 5, 12, 19 to 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Decker et al.

For claim 5, the general formula for the silicone resins would have found some of the claimed silicone resins to have been obvious. See for instance column 4, lines 49

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and on, and compare to the second silicone resin in claim 5. Note too that the only difference between the silicone resin in this claim and that in the working examples is that the working examples include diphenyl siloxy units rather than phenyl methyl siloxyl units. This difference, though, is rendered obvious by the teachings on column 4, lines 58 and 59, which specifically refers to siloxy units having phenyl methyl units. See also the sixth silicone resin in claim 5 which requires M units having an amino functional group. Such units are disclosed on column 4, line 52 (the units labeled d.).

For claim 12, one having ordinary skill in the art would have been motivated to adjust the NH- and epoxy equivalent weight in the composition of Decker et al. in an effort to optimize and/or adjust the degree of crosslinking that occurs between the two reactants. Adjusting the ratio in the range of slightly above to slightly lower than a 1:1 ratio would have been obvious in an effort to ensure complete cure of at least reactants without having a large number of non-reacted functional groups remaining in the composition. In this manner one having ordinary skill in the art would have found the claimed ratio obvious.

For claim 19, Decker et al. teach casting the epoxy resin composition therein in an organic solvent. One having ordinary skill in the art would have been motivated to replace such a solvent with water, thus forming an aqueous emulsion, in an effort to reduce/eliminate the amount of VOC associated with the claimed composition. Such VOCs are known to have negative properties associated therewith.

For claim 22, on one hand note that this is a product by process requirement that need not specifically be taught by the prior art. On the other hand, since it would have been obvious to form the composition as a whole into an emulsion, adding the components individually in an emulsion form would have been obvious to one having ordinary skill in the art in an effort to expedite the emulsion formation.

7. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to teach or suggest such a specific silicone resin.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-272-1090. The examiner can normally be reached on Monday and Wednesday to Friday, 10am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Margaret G. Moore/  
Primary Examiner, Art Unit 1796

mgm  
12/20/08